

Fluoropolymers are some of the most versatile engineering materials known and, since their discovery 70 years ago, have been used in nearly every field of modern industry, technology, and science. Their non-stick properties became commonly recognized by the consuming public when E. I. DuPont began marketing his “Teflon®” brand product for use on cookware, as a fiber treatment for stain resistance, and in other household applications.

Fluoropolymer material is recognized for its excellent resistance to heat — up to 500°F continuously. Lesser known is its usefulness in extremely cold temperatures — well below -200°F. It will remain reasonably flexible to -110°F.

Because fluoropolymers are almost universally inert to industrial chemicals and solvents, their use for corrosion protection has become one of their largest growth areas. With few exceptions, fluoropolymer tubing can handle virtually any corrosive chemical in use today.

NewAge® Industries offers one of the widest assortments of tubing products made of fluoropolymers by any supplier. We can meet most any need for straight tubing, thinner-walled AWG and fractional sizes (for electrical insulation and jacketing), corrugated (for increased bend radii), convoluted (for easier flush cleaning), or retractable coiled fluoropolymer tubing, along with injection-molded PFA compression fittings (see page 9). And NewAge now offers stainless steel overbraided PTFE hose for demanding applications involving automotive, chemical, and petrochemical uses. ■

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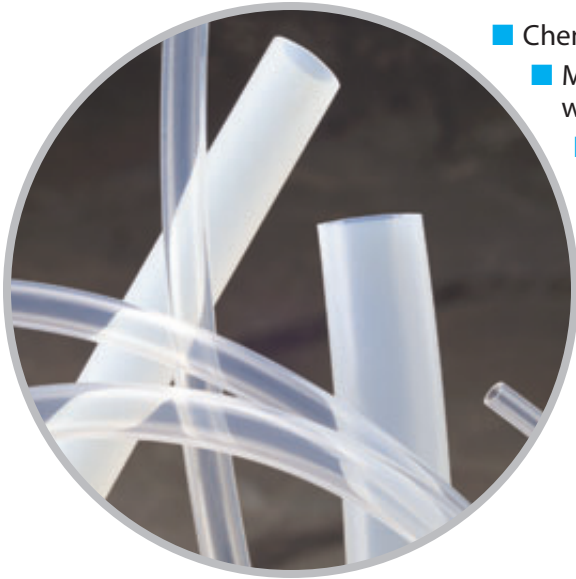
Fluid Transfer Specialists®

Applications

- Adhesives & Hot Glue Delivery ■ Automotive ■ Cable Bundling ■ Chemical Transfer ■ Connector Sleeves ■ Corrosives ■ Cryogenics ■ Deionized Water Transfer ■ Environmental Sampling ■ Flame Retardant Covering ■ Food & Beverage Processing ■ Internal Sheathing ■ Laboratory & Medical Uses ■ Lighting Covers ■ Paint Spray Systems ■ Petrochemical Transfer ■ Pharmaceutical Processing and Packaging ■ Pure Air Systems ■ Pure Water & Fluid Systems ■ Push-Pull Cable Jacketing ■ Robotics ■ Sight Glass (FEP) ■ Solvent Transfer ■ Wire Insulation ■ More



PTFE, FEP, & PFA Formulations



- Chemically inert; low permeability
- Manufactured from FDA-sanctioned ingredients for use with food contact surfaces
- Lowest coefficient of friction of any solid material
- Widest service temperature of any plastic tubing (-275°F to 500°F)
- Excellent electrical and weathering properties; non-flammable
- Made without plasticizer which can leach into critical streams
- Ultra-high-purity grades available for the semiconductor industry



What's the difference?

PTFE (Polytetrafluoroethylene) a fluorocarbon-based polymer, is a resin supplied in powdered form, which is mixed, preformed, and extruded into a paste, and then finally tubing. PTFE tubing can be used in a large variety of applications due to its high chemical resistance, high and low temperature capability, resistance to weathering, electrical and thermal insulation, and lowest coefficient of friction of any solid material. The tubing is translucent white in color.

FEP (Fluorinated Ethylene Propylene) resin is pelletized for its hot-melt extrusion process. FEP tubing is known for its gas and vapor permeability properties and excellent UV transmission ratings. While very similar in composition to PTFE, there are a few notable differences. FEP has a lower heat shrink temperature and is clearer and more flexible than PTFE.

PFA (Perfluoroalkoxy) resin, like FEP, belongs to a class of melt-processible fluoroplastics. PFA tubing is also known for its gas and vapor permeability properties and excellent UV transmission ratings. It is similar in composition to FEP but has better heat resistance and a smoother surface. It, too, is clearer and more flexible than PTFE.

Notes

Almost totally inert, FLUOROPOLYMER tubing can be used with virtually all industrial solvents, chemicals, and corrosive materials, even at elevated temperatures. It does, however, react with fluorine, molten sodium hydroxide, and molten alkali metals.

FLUOROPOLYMER tubing can be steam or chemically sterilized in-line with any industrial cleaner, solvent, or sterilizing method.

FLUOROPOLYMER's non-stick property allows transport of viscous, sticky materials without line clogging. It also offers outstanding aging resistance.

PTFE's translucent white color will vary naturally from lot to lot, however the quality and physical properties do not change. FEP and PFA are clearer and can be heat sealed and heat bonded.

Permanent color striping, etching, and longer-than-listed lengths are available through minimum order. Polyethylene-jacketed, thin-wall fluoropolymer tubing, for low-cost purity, is also available through minimum order — call for details.

Recommended Fittings

- Pureloc® injection molded tube fittings on pg. 9

Custom Services

- **Cut** ■ **Color** ■ **Heat-Form***
- **Size** ■ **Overbraid** *FEP & PFA only

Call for more information: **800-506-3924**
or **215-526-2300**

Physical Properties**

	PTFE	FEP	PFA
Hardness, Shore D	50-65	55	60
Tensile Strength, psi	3000-5000	3500	3500
Elongation at Break, %	200-400	300	300
Brittle Temperature, °F	<-400	<-400	<-329
Max. Continuous Operating Temp., °F	500	400	500

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

Meet Some of NewAge Industries' Owners

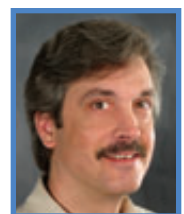
Through an Employee Stock Ownership Plan (ESOP), we're part owners in the company, and that makes *your* satisfaction an investment in *our* future.



Thurman Neal
Plastic Manufacturing/Owner
7 years



Deanna Fabrizio
Marketing Assistant/Owner
3 years



Michael Horvath
Technical Sales Rep./Owner
4 years

ESOP Employee Owned for Your Benefit

Note that sizes are listed first due to the variety of materials offered

FLUOROPOLYMER TUBING – Inch Sizes

ID (IN.)	OD (IN.)	WALL (IN.)	STANDARD LENGTH (FT.)†	PART NO. PTFE	WORKING PSI AT 70°F	BURST PSI AT 70°F	PART NO. FEP	WORKING PSI AT 70°F	BURST PSI AT 70°F	PART NO. PFA	WORKING PSI AT 70°F	BURST PSI AT 70°F
1/32	1/16	.015	100	300 0074*								
1/32	3/32	.030	100	300 0151	389	1962	310 0048	389	1962			
1/16	1/8	.030	50, 100	300 0228	295	1487	310 0090	295	1487	320 0176	369	1859
1/16	3/16	.063	50, 100	300 0305	393	1983	310 0167	393	1983			
3/32	5/32	.030	50, 100	300 0382	238	1197	310 0244	238	1197	320 0330	297	1497
1/8	3/16	.030	50, 100	300 0459	199	1002	310 0321	199	1002	320 0407	249	1253
1/8	1/4	.063	50, 100	300 0536	300	1511	310 0398	300	1511	320 0484	380	1899
3/16	1/4	.030	50, 100	300 0690	150	756	310 0552	150	756	320 0561	190	945
3/16	5/16	.063	50, 100	300 0767	242	1220	310 0629	242	1220			
1/4	5/16	.030	50, 100	300 0844	120	606	310 0706	120	606	320 0715	150	758
1/4	3/8	.063	25, 50, 100	300 0921	200	1024	310 0783	200	1024	320 0792	260	1280
5/16	3/8	.030	25, 50, 100	300 0998	100	506	310 0860	100	506	320 0869	125	633
5/16	7/16	.063	25, 50, 100	300 1075	175	882	310 0937*	175	882			
3/8	7/16	.030	25, 50, 100	300 1152	86	435	310 1014	86	435			
3/8	1/2	.063	25, 50, 100	300 1229	150	774	310 1091	150	774	320 1100	195	1968
7/16	1/2	.030	25, 50, 100	300 1306	75	381	310 1168	75	381			
7/16	9/16	.063	25, 50, 100	300 1383	137	690				320 1254	171	862
1/2	9/16	.030	25, 50, 100	300 1460	67	339	310 1322	67	339	320 1331	84	424
1/2	5/8	.063	25, 50, 100	300 1537	125	622	310 1399	125	622	320 1408	160	778
9/16	5/8	.030	25, 50, 100	300 1614	60	305				320 1485*	75	381
9/16	11/16	.063	25, 50, 100	300 1691*	112	567						
5/8	11/16	.030	25, 50, 100	300 1768	55	278						
5/8	3/4	.063	25, 50, 100	300 1845	100	520	310 1707	100	520	320 1716	132	650
11/16	3/4	.032	25, 50, 100	300 1922	50	255	310 1784	50	255			
3/4	.830	.040	5, 10 Straight	300 1999*	61	305	310 1938	61	305			
3/4	7/8	.063	5, 10 Straight				310 2015	90	447			
7/8	1	.063	5, 10 Straight				310 2169	80	392			
1	1.100	.050	5, 10†† Straight	300 2307	47	235	310 2246	47	235	320 2255	58	294
1	1 1/8	.063	5, 10 Straight				310 2323	69	349			
1-1/4	1 3/8	.063	5, 10 Straight				310 2477	57	286			
1-1/2	1- 5/8	.063	5, 10 Straight				310 2631*					
2	2-1/8	.063	5, 10 Straight				310 2708	37	186			

*Limited stock item; lead times and minimums apply — call for details.

†Sold by standard coil length only.

††10 ft. length available in FEP and PFA only.

Add length suffix to part number when ordering. Example: 50 ft. of 1/16" x I.D. 1/8" O.D. PTFE is part number 300 0228-50.

NOTE: Orders for 50 ft. lengths of PTFE tubing may be filled with a maximum of two lengths of product totaling 50 ft.

Orders for 100 ft. lengths of PTFE tubing may be filled with a maximum of three lengths of product totaling 100 ft.

All FEP and PFA lengths are supplied in single-section packages.

BOLD indicates the critical dimension for fittings application.

FLUOROPOLYMER TUBING – Metric Sizes

ID (MM)	OD (MM)	WALL (MM)	STANDARD LENGTH (FT.)†	PART NO. PTFE	PART NO. FEP	PART NO. PFA
2	4	1	50, 100	301 0175	311 0177	
4	6	1	50, 100	301 0350	311 0352	321 0354
6	8	1	50, 100	301 0525	311 0527	321 0529
8	10	1	25, 50, 100	301 0700	311 0702	321 0704
10	12	1	25, 50, 100	301 0875*	311 0877	321 0879*
12	14	1	25, 50, 100	301 1050*	311 1052	
14	16	1	25, 50, 100	301 1225		

*Limited stock item; lead times and minimums apply — call for details.

†Sold by standard coil length only.

Add length suffix to part number when ordering. Example: 50 ft. of 2mm I.D. x 4mm O.D. PTFE is part number 301 0175-50.

NOTE: Orders for 50 ft. lengths of PTFE tubing may be filled with a maximum of two lengths of product totaling 50 ft.

Orders for 100 ft. lengths of PTFE tubing may be filled with a maximum of three lengths of product totaling 100 ft.

All FEP and PFA lengths are supplied in single-section packages.

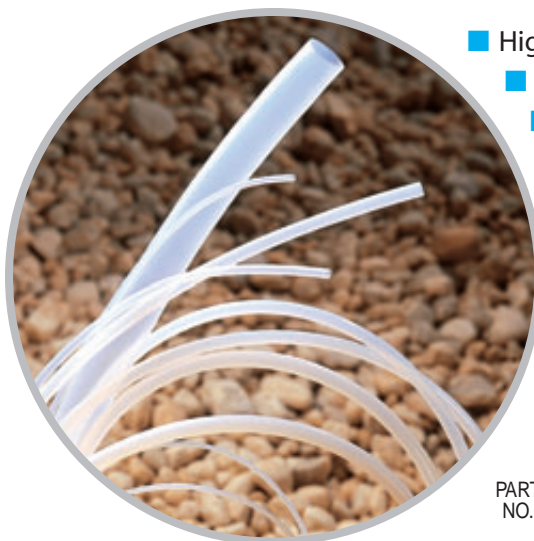
BOLD indicates the critical dimension for fittings application.

AWG and Fractional sizes are found on page 4.

AWG & Fractional PTFE Tubing



PTFE Formulation Tubing in Three Wall Thicknesses



- High dielectric strength — 500 Volts/mil
- Excellent volume resistivity — 10^{18} OHM-CM H2
- Unaffected by thermal aging at 400°F
- Non-flammable and practically smokeless when incinerated
- Widest service temperature available (-275°F to 500°F)

Meets Specifications:
MIL-I-22129C, ASTM D-3295-81A, AMS 3653C, AMS 3654, AMS 3655



Made in U.S.A.

Notes

Outstanding chemical and temperature resistance, coupled with fluoropolymer's low coefficient of friction, makes AWG & FRACTIONAL PTFE tubing an excellent choice on primary conductors as protection from chemical contact or temperature extremes.

AWG & FRACTIONAL PTFE tubing resists melt-off by soldering irons when making electrical terminations, especially in close-quarter installations.

The product's outstanding thermal properties offer continuous use from cryogenic temperatures up to 500°F. It is also non-aging, so brittleness is eliminated.

PTFE is translucent white in color, however, the degree of whiteness will naturally vary from lot to lot. This color variance has no bearing on the material's quality or physical properties.

Physical Properties**

Hardness, Shore D	50-55
Specific Gravity	2.15
Tensile Strength, psi	3200
Elongation at Break, %	250-450
Brittle Temperature	<-275°F
Max. Operating Temp.	500°F

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

PART NO.	STANDARD WALL (IN.)	PART NO.	THIN WALL (IN.)	PART NO.	LIGHT WALL (IN.)	AWG./ IN. SIZE	ID (IN.) MIN/MAX	STANDARD LENGTH (FT.)†
330 0101	.007/.011	330 0094	.007/.011	330 0087	.004/.008	30	.010/.015	100, 1000
330 0213	.007/.011	330 0206	.007/.011			28	.013/.018	100, 1000
330 0325	.007/.011	330 0318	.007/.011	330 0311	.004/.008	26	.016/.021	100, 1000
330 0437	.010/.014	330 0430	.007/.013	330 0423	.004/.008	24	.020/.026	100, 1000
330 0549	.010/.014	330 0542	.007/.013	330 0535	.004/.008	23	.023/.029	100, 1000
330 0661	.010/.014	330 0654	.007/.013	330 0647	.004/.008	22	.026/.032	100, 1000
330 0773	.010/.014	330 0766	.007/.013	330 0759	.004/.008	21	.029/.035	100, 1000
330 0885	.013/.019	330 0878	.009/.015	330 0871	.004/.008	20	.032/.038	100, 1000
330 0997	.013/.019	330 0990	.009/.015	330 0983	.004/.008	19	.036/.042	100, 1000
330 1109	.013/.019	330 1102	.009/.015	330 1095	.004/.008	18	.040/.046	100, 1000
330 1221	.013/.019	330 1214	.009/.015	330 1207*	.004/.008	17	.045/.052	100, 1000
330 1333	.013/.019	330 1326	.009/.015	330 1319	.004/.008	16	.051/.058	100, 1000
330 1445	.013/.019	330 1438*	.009/.015	330 1431	.004/.008	15	.057/.065	100, 1000
330 1557	.013/.019	330 1550	.009/.015	330 1543	.006/.010	14	.064/.072	100, 500
330 1669	.013/.019	330 1662	.009/.015	330 1655	.006/.010	13	.072/.081	100, 500
330 1781	.013/.019	330 1774	.009/.015	330 1767*	.006/.010	12	.081/.091	100, 500
330 1893	.013/.019	330 1886*	.009/.015	330 1879	.006/.010	11	.091/.101	100, 500
330 2005	.013/.019	330 1998	.009/.015	330 1991	.006/.010	10	.102/.112	100, 500
330 2117	.016/.024	330 2110	.012/.018	330 2103	.006/.010	9	.114/.124	100, 500
330 2229	.016/.024	330 2222	.012/.018	330 2215	.006/.010	8	.129/.139	100
330 2341	.016/.024	330 2334	.012/.018	330 2327	.006/.010	7	.144/.155	100
330 2453	.016/.024	330 2446	.012/.018	330 2439	.007/.013	6	.162/.174	100
330 2565	.016/.024	330 2558	.012/.018	330 2551	.007/.013	5	.182/.195	100
330 2677	.016/.024	330 2670	.012/.018	330 2663	.007/.013	4	.204/.218	100
330 2789	.016/.024	330 2782	.012/.018	330 2775	.007/.013	3	.229/.244	100
330 2901	.016/.024	330 2894	.012/.018	330 2887	.007/.013	2	.258/.273	100
330 3013	.016/.024	330 3006	.012/.018	330 2999	.007/.013	1	.289/.305	100
330 3125	.016/.024	330 3118	.012/.018	330 3111	.009/.015	0	.325/.342	100
331 0167	.016/.024	331 0160	.012/.018	331 0153	.006/.010	1/8"	.120/.130	100 Random
331 0265	.016/.024	331 0258	.012/.018	331 0251	.007/.013	3/16"	.188/.198	100 Random
331 0363	.016/.024	331 0356	.012/.018	331 0349	.007/.013	1/4"	.250/.260	100 Random
331 0461	.016/.024	331 0454	.012/.018	331 0447	.009/.015	5/16"	.313/.332	100 Random
331 0566	.019/.031	331 0559	.015/.025	331 0552	.012/.018	3/8"	.375/.394	100 Random
331 0664	.019/.031	331 0657	.015/.025	331 0650	.015/.021	7/16"	.438/.458	100 Random
331 0769	.019/.031	331 0762	.015/.025	331 0755	.015/.021	1/2"	.500/.520	100 Random
331 0860	.024/.036	331 0853	.020/.030			5/8"	.625/.650	100 Random
331 0958	.027/.043	331 0951	.025/.035			3/4"	.750/.775	5 Straight
331 1056	.027/.043					7/8"	.875/.927	5 Straight
331 1154	.027/.043					1"	1.000/1.030	5 Straight

*Available in 100 foot length only.

†Sold by standard length only.

Add length suffix to part number when ordering. Example: 100 ft. of AWG 30, thin wall tubing is part number 330 0094-100.

Note: 500 and 1000 ft. lengths are furnished on spools and may have up to three splices.

Recommended Fittings

- Pureloc® injection molded tube fittings, pg. 9

Custom Services

- Cut
- Color
- Size
- And More

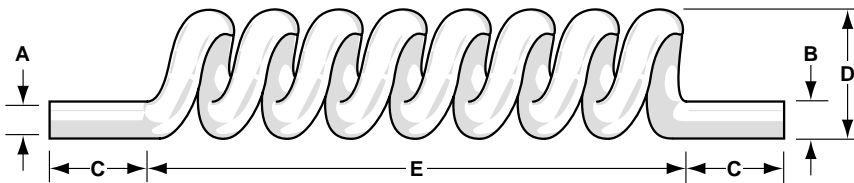
Call for more information
800-506-3924

Coiled FEP Tubing

- Made of chemically inert clear FEP
- Manufactured from FDA-sanctioned ingredients
- Heat set into a retractable coil; excellent recoil memory
- Offers all the chemical and electrical insulation properties of standard FEP fluoropolymer tubing
- Allows flexibility to otherwise semi-rigid fluoropolymer tubing
- All Coiltef is made to order — call for details



Made in U.S.A.



PART NO.	A ID (IN.)	B OD (IN.)	D [^] O.D. OF COIL (IN.)	E [^] MAXIMUM AVAILABLE EXPANDED LENGTH; NOT INCLUDING TAILS (IN.)
360 0072*	1/16	3/16	1-1/8	12, 24, 48, 72
360 0149*	1/8	1/4	1-1/2	12, 24, 48, 72
360 0226*	3/16	5/16	2-1/4	12, 24, 48, 72
360 0303*	1/4	3/8	2-3/8	12, 24, 48, 72
360 0457*	3/8	1/2	4	12, 24, 48

*Non-stock item; lead times and minimums apply — call for details.

[^]These dimensions are nominal.

Add length suffix to part number when ordering. Example: 12 inches of 1/16" I.D. x 3/16" O.D. tubing is part number 360 0072-12.

The retracted length is approximately 1/4 of the maximum expanded length excluding tails.

Wall thickness for all standard sizes is 1/16. Tail length (item C) is 6" for all listed sizes.

BOLD indicates the critical dimension for fittings application.

Recommended Fittings

- Pureloc® injection molded tube fittings, pg. 9

Custom Services

- **Cut** ■ **And More**
- **Size**

Call for more information
800-506-3924

Notes

Almost totally inert, COILTEF can be used with all industrial solvents, chemicals, and corrosive materials even at elevated temperatures. It does, however, react with fluorine, molten sodium hydroxide, and molten alkali metals.

Fluoropolymer's non-stick property allows transport of viscous, sticky material without line clogging. It also offers outstanding aging resistance.

COILTEF is manufactured through a fabrication process which heat sets the coils. The coils should remain stable up to 200°F. At higher temperatures the coils will begin to relax and lose their set. If the application involves elevated temperatures, in-house testing is recommended.

COILTEF may be steam or chemically sterilized in-line with any industrial cleaner, solvent, or sterilizing method. Care should be taken with steam sterilization to prevent coil relaxation. Testing is recommended.

COILTEF can be manufactured from .085" to 1/2" tubing I.D. The coil diameter can be produced from 3/4" O.D. to 4" O.D.

PFA-formulated COILTEF is also available by special order.

Physical Properties**

Hardness, Shore D	55
Tensile Strength, psi	3500
Elongation at Break, %	300
Brittle Temperature, °F††	<-400
Max. Operating Temp., °F††	400

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application. ††Temperatures are for standard extruded (non-coiled) tubing. See "Notes" for additional information.

More NewAge Industries' Owners

ESOP

Employee Owned for Your Benefit



Ann Stanley
Fittings/Owner
2 years

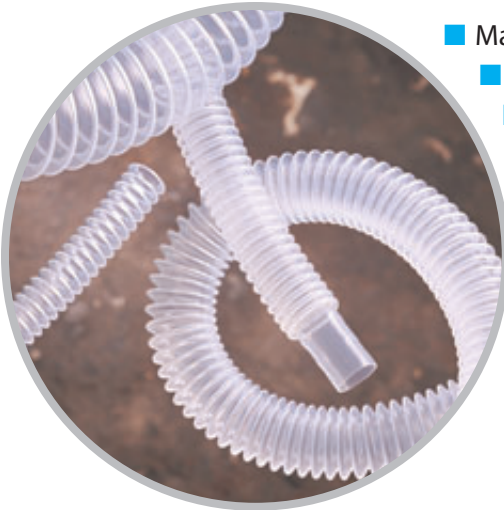


Josh Ream
Silicone Manufacturing Supv./Owner
11 years

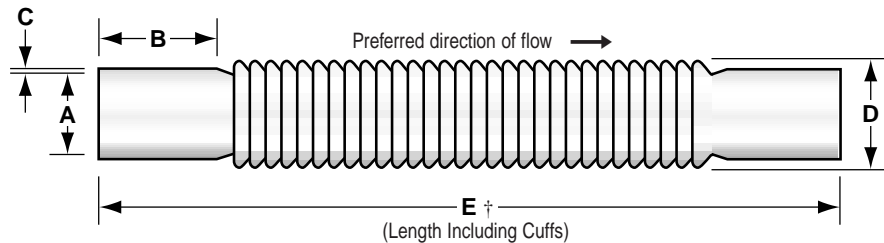


Marty Golin
Technical Sales Rep./Owner
6 years

Corrugated FEP Tubing



- Made from FEP fluoropolymer tubing
- Corrugations allow a nearly zero bend radius — easily flexed
- Can be extended or compressed without affecting the tube's I.D.
- Made from FDA-sanctioned ingredients
- Made without plasticizers which can leach into critical streams
- Has all the chemical and electrical properties of straight-walled FEP tubing
- May be overbraided with Kevlar® for higher pressures^



Notes

Vacuum Service: 29.9 in./Hg.
Bend Diameter: 1/2 of tubing I.D.

Optimal flow is achieved and turbulence minimized by passing fluids through CORRTEF in the direction of the corrugation angles (as illustrated).

CORRTEF is heat sealable, and the cuffs (straight ends) are made to accept standard barbed fittings. The end may be flared or expanded to permit shrink-tight connections.

CORRTEF is manufactured in an industrial atmosphere and should be properly sterilized for clean-flow applications. For optimal cleaning of CORRTEF, the tube should be stretched to its maximum length and held vertically (direction of flow: down). Due to the annular corrugations, it may not be possible to remove all traces of particulate from CORRTEF, even under optimal cleaning conditions.

^Overbraiding with Kevlar will permit a minimum increase of six times the listed pressures. Kevlar overbraiding is available for sizes up to 7/8" I.D. – call for details.

Physical Properties**

Hardness, Shore D	50-55
Tensile Strength, psi	3500
Elongation at Break, %	325
Brittle Temperature, °F††	<-275
Min. Continuous Svc. Brittle Temp., °F††	-100
Maximum Operating Temperature, °F††	400
Max. Cont. Svc. Temp., zero pressure, °F††	200

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.
††Temperatures are for standard extruded (non-corrugated) tubing.

PART NO.	A MAX. ID (IN.)	B CUFF LENGTH NOM. (IN.)*	C WALL NOM. (IN.)	D CORRUGA- TION OD REF. (IN.)	WORKING PSI AT 70°F	BURST PSI AT 70°F
340 0075	1/4	3/4	.015	3/8	62	248
340 0152	3/8	1	.020	9/16	50	200
340 0229	1/2	1	.025	3/4	42	168
340 0306	5/8	1	.025	15/16	37	148
340 0383	3/4	1-1/2	.030	1-1/16	30	120
340 0460	7/8	1-1/2	.030	1-1/4	25	100
340 0537	1	2	.035	1-3/8	20	80
340 0614	1-1/4	2	.035	1-5/8	17	68
340 0691	1-1/2	2	.035	1-13/16	15	60
340 0768	2	2	.040	2-5/8	12	48

† 'E' dimension to be specified at time of order. Maximum overall available length: 12 ft. (including cuffs).

*Workable I.D. length of the cuff (straight ends). All lengths will be supplied with 'B' dimension cuffs.

BOLD indicates the critical dimension for fittings application.

Recommended Fittings & Clamps

- Thermobarb® barbed fittings
- Oetiker® ear type clamps
- Kwik Clamp™ nylon double bond hose clamps
- Worm gear clamps

Custom Services

- **Cut**
- **Overbraid**
- **Size**
- **And More**

Call for more information
800-506-3924

More NewAge Industries' Owners

ESOP

Employee Owned
for Your Benefit



Chris Kourelis
Warehouse/
Owner
5 years



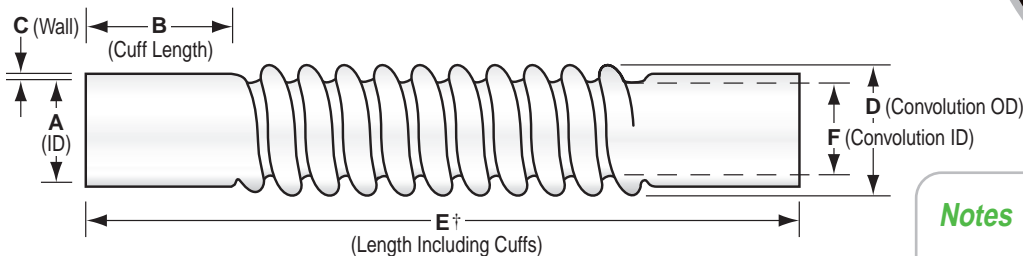
Khim Kim
Silicone Manu-
facturing/Owner
2 years



Steve Midgette
Director of Finance &
Human Resources/Owner
17 years

Convuluted PTFE Tubing

- Translucent PTFE tubing offers excellent chemical and electrical properties
- Available from stock with or without a stainless steel wire encircling the O.D.
- Wire coil provides increased pressure capability and aids in electrical grounding
- Easily flexed — spiral construction allows far greater flexibility than straight wall tubing
- Spiral construction also allows for easier cleaning
- Made from FDA-sanctioned ingredients
- Available to AMS-T-81914/1[^] (without wire only)



CONTEF Without Wire

PART NO.	A ID (IN.)	B NOM. (IN.)	C NOM. (IN.)	D REF. (IN.)	F NOM. (IN.)	BEND RADIUS (IN.)	MAX LENGTH (FT.)	WORKING PSI AT 70°F	BURST PSI AT 70°F
350 0070	1/4	3/4	.015	.320	.185	1/2	125	62	248
350 0147	5/16	1	.020	.414	.277	3/4	125	56	220
350 0224	3/8	1	.020	.450	.308	7/8	125	52	200
350 0301	1/2	1	.020	.590	.431	1-1/4	100	40	160
350 0378	5/8	1-1/4	.025	.660	.493	1-1/2	75	35	140
350 0455	3/4	1-1/2	.025	.780	.617	1-3/4	75	30	120
350 0532	1	2	.030	1.100	.862	2.230	50	27	100
350 0609	1-1/4	2-1/2	.035	1.600	1.170	2-3/4	40	24	80
350 0686	1-1/2	2-1/2	.040	1.910	1.450	3	40	20	65
350 0763	2	2-1/2	.043	2.450	1.980	4-1/4	40	17	55
350 0917*	3	3	.062	3-3/4	3.000	7	30	15	50
350 0994*	4	3	.062	4-3/4	4.000	9	20	12	40

*Limited stock availability; lead times and minimums may apply — call for details.
 † 'E' dimension to be specified at time of order. All lengths will be supplied with 'B' dimension cuffs.
BOLD indicates the critical dimension for fittings application.

CONTEF With Wire

PART NO.	A ID (IN.)	B NOM. (IN.)	C NOM. (IN.)	D REF. (IN.)	F NOM. (IN.)	BEND RADIUS (IN.)	MAX LENGTH (FT.)	WORKING PSI AT 70°F	BURST PSI AT 70°F
352 0076	1/4	3/4	.015	.320	.185	1/2	12	100	400
352 0153	5/16	1	.020	.414	.277	3/4	12	87	348
352 0230	3/8	1	.020	.450	.308	7/8	12	75	300
352 0307	1/2	1	.020	.590	.431	1-1/4	20	68	272
352 0384	5/8	1-1/4	.025	.660	.493	1-1/2	20	62	248
352 0461	3/4	1-1/2	.025	.780	.617	1-3/4	20	55	220
352 0538	1	2	.030	1.100	.862	2.230	20	45	180

† 'E' dimension to be specified at time of order. All lengths will be supplied with 'B' dimension cuffs.
BOLD indicates the critical dimension for fittings application.

Notes

CONTEF's helical construction aids in self cleaning when flushed with standard cleaning fluids.

The cuffs (straight ends) are made to accept standard barbed fittings. Hose assemblies made to your specifications are available (see page 69).

PTFE's color will vary naturally from lot to lot, but the quality and physical properties do not change.

FEP CONTEF for longer continuous lengths — up to 500 ft. — is available through custom order.

CONTEF Without Wire:

Vacuum Service: 27 in./Hg at 72°F.
 Convolutions are molded into the tubing and will not cold flow into a straight wall under normal conditions.

[^]CONTEF with AMS (Aerospace Material Specifications) is available without wire only and is not stocked — call for details.

CONTEF With Wire:

Vacuum Service: 27 in./Hg at 72°F.
 For high vacuum applications, CONTEF can be produced with wire on the I.D. — call for details.

Physical Properties**

	WITHOUT WIRE	WITH WIRE
Hardness, Shore D	55-65	55-65
Tensile Strength, min. psi	2000	2000
Elongation at Break, %	300	200
Brittle Temperature, °F††	<-275	<-110
Max. Operating Temperature, °F††	500	350
Max. Cont. Svc. Temp., zero pressure, °F††	450	350

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

††Temperatures are for standard extruded (non-convoluted) tubing.

Custom Services

- Cut
- Overbraided
- Size
- And More

Call for more information
800-506-3924

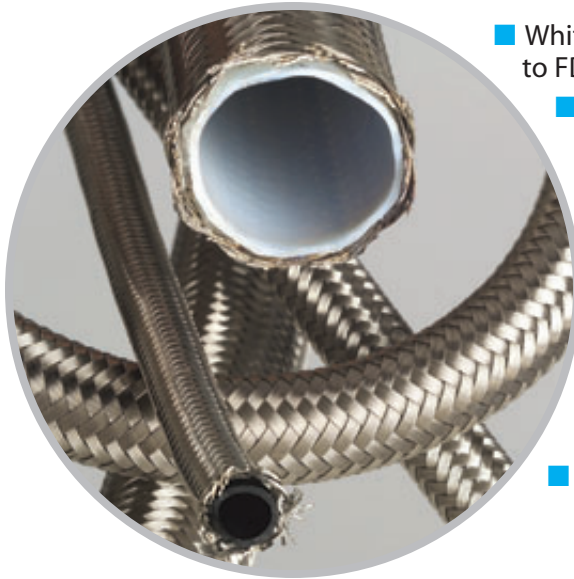
Recommended Fittings & Clamps

- Thermobarb® barbed fittings
- Oetiker® ear type clamps
- Kwik Clamp™ nylon double bond hose clamps
- Worm gear clamps

Stainless Steel Overbraided PTFE Hose



Smooth Core PTFE Tubing with Stainless Steel Overbraiding



- White PTFE inner core is made from non-toxic ingredients conforming to FDA standards
- Black core is electrically conductive to release or eliminate static charge
- Core material is inert; will not impart taste or odor or contaminate the stream
- Wide service temperature range (-65°F to 450°F)
- Excellent weathering properties; non-flammable
- Non-stick surface is easily cleaned by autoclaving, steam, or detergent
- Series 300 stainless steel overbraid provides for high pressures and protection of the core
- Meets or exceeds SAE 100R14 specifications for size and pressure

Notes

Smooth core STAINLESS STEEL OVERBRAIDED PTFE HOSE is constructed of extruded virgin PTFE material with a 300 stainless steel wire braid reinforcement jacket. The core is inert and offers long flexural life, low permeability, non-flammability, and the lowest coefficient of friction of any solid material.

The overbraid permits higher pressure uses, reduces the possibility of kinking, and generally protects the core.

Black conductive core hose works well in applications where static charge must be dissipated, such as those involving high resistivity fluids or gases at high velocity.

Flush cleaning of the hose to eliminate manufacturing residue is recommended prior to use.

Physical Properties**

Temperature Range, °F	-65 to 450
Average Maximum Length, ft.	
3/16" through 1/2":	300
5/8" and 3/4":	150
1" and 1-1/4":	75

**Values listed are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

Custom Services

- Cut
- Overbraid
- Size
- And More

Call for more information:
800-506-3924

WHITE CORE – .030" inner core wall

PART NO.	DASH SIZE	NOM. HOSE SIZE (IN.)	AVG. ID (IN.)	AVG. OD (IN.)	WORKING PSI AT 70°F	BURST PSI AT 70°F	BEND RADIUS (IN.)	LBS. PER FOOT
900 0138	-4	1/4	.187	.312	3000	12000	2	.077
900 0208	-6	3/8	.312	.445	2500	10000	4	.110
900 0278	-8	1/2	.405	.549	2000	8000	5.2	.124
900 0348	-10	5/8	.500	.648	1500	6000	6.5	.154
900 0418	-12	3/4	.625	.778	1200	4800	7.7	.170
900 0558	-16	1	.875	1.030	1000	4000	9	.273

BOLD indicates the critical dimension for fittings application. Consult factory for assembly information.

BLACK CONDUCTIVE CORE – .030" inner core wall

PART NO.	DASH SIZE	NOM. HOSE SIZE (IN.)	AVG. ID (IN.)	AVG. OD (IN.)	WORKING PSI AT 70°F	BURST PSI AT 70°F	BEND RADIUS (IN.)	LBS. PER FOOT
901 0274	-8	1/2	.405	.549	2000	8000	5.2	.124
901 0344	-10	5/8	.500	.648	1500	6000	6.5	.154
901 0414	-12	3/4	.625	.778	1200	4800	7.7	.170
901 0554	-16	1	.875	1.030	1000	4000	9	.273

BOLD indicates the critical dimension for fittings application. Consult factory for assembly information.

More NewAge Industries' Owners

ESOP

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for Your Benefit



Khoeth Som
Fabrication/Manufacturing /Owner
5 years



Brian Katchur
Product Development/Owner
8 years

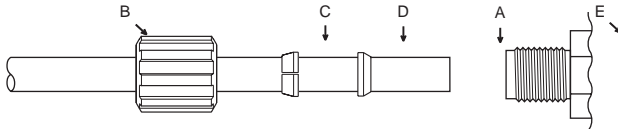


Kelly Liszewski
Customer Service Rep./Owner
10 years

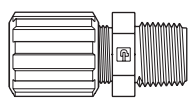
PFA Compression Fittings

- Made from chemically inert PFA fluoropolymer
- No flow restrictions
- Easy to disconnect and reuse
- Excellent lock and seal ability
- Precision molded to exacting tolerances

Installation Instructions:

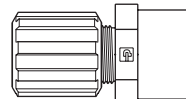


1. Cut tubing (A) cleanly at 90°.
2. Push tubing through small end of nut (B), gripper (C), ferrule (D), and seat the tubing end into the fitting body as far as it will go (E).
3. Thread the nut onto the body and finger tighten. To complete the installation, tighten the nut at least one additional turn.



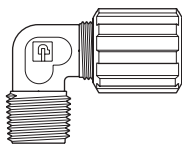
Male Adapter

PART NO.	TUBE OD (IN.) x NPT
532 0644	1/8 x 1/8
532 0672	1/8 x 1/4
532 0700	1/4 x 1/8
532 0728	1/4 x 1/4
532 0756	1/4 x 3/8
532 0784	1/4 x 1/2
532 0812	3/8 x 1/8
532 0833	3/8 x 1/4
532 0868	3/8 x 3/8
532 0896	3/8 x 1/2
532 0924	1/2 x 1/4
532 0952	1/2 x 3/8
532 0980	1/2 x 1/2
532 1008	1/2 x 3/4
532 1036	3/4 x 1/2
532 1064	3/4 x 3/4



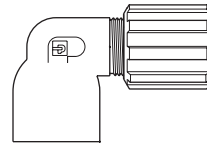
Female Adapter

PART NO.	TUBE OD (IN.) x FNPT
532 0028	1/8 x 1/8
532 0056	1/8 x 1/4
532 0084	1/4 x 1/8
532 0112	1/4 x 1/4
532 0140	1/4 x 3/8
532 0168	1/4 x 1/2
532 0224	3/8 x 1/4
532 0252	3/8 x 3/8
532 0280	3/8 x 1/2
532 0308	1/2 x 1/4
532 0336	1/2 x 3/8
532 0364	1/2 x 1/2
532 0392	1/2 x 3/4
532 0420	3/4 x 1/2
532 0448	3/4 x 3/4



Male 90° Elbow

PART NO.	TUBE OD (IN.) x NPT
532 3080	1/4 x 1/8
532 3108	1/4 x 1/4
532 3192	3/8 x 1/8
532 3220	3/8 x 1/4
532 3248	3/8 x 3/8
532 3276	3/8 x 1/2
532 3304	1/2 x 1/4
532 3332	1/2 x 3/8
532 3360	1/2 x 1/2
532 3388	1/2 x 3/4
532 3416	3/4 x 1/2
532 3444	3/4 x 3/4



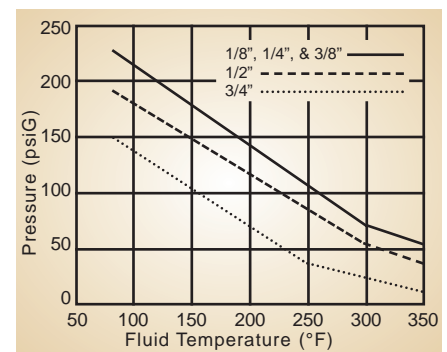
Female 90° Elbow

PART NO.	TUBE OD (IN.) x FNPT
532 2604	1/8 x 1/8
532 2660	1/4 x 1/4
532 2688	3/8 x 1/4
532 2716	3/8 x 3/8
532 2744	3/8 x 1/2
532 2772	1/2 x 1/4
532 2828	1/2 x 1/2

Notes

Made from virgin, high purity PFA fluoropolymer, PURELOC is ideal for ultra-pure fluid applications where contamination-free systems are used. This includes semiconductor manufacturing, food and beverage processing, medical and biomedical, laboratory, chromatography equipment, and the chemical industries.

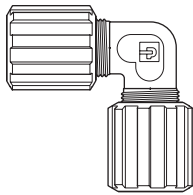
The gripper coupled with the precision-made ferrule provides excellent leak-proof connections and prevents tubing blow-out.



The values above are typical for the material used in manufacture, except where noted, and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

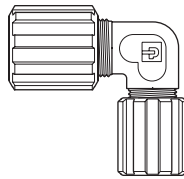
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PFA Compression Fittings



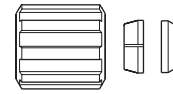
Union 90° Elbow

PART NO.	TUBE OD (IN.)
532 3621	1/8
532 3640	1/4
532 3696	3/8
532 3724	1/2
532 3752	3/4



Reducing 90° Elbow

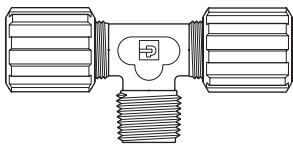
PART NO.	TUBE OD x TUBE OD (IN.)
532 3948	1/4 x 3/8
532 4004	3/8 x 1/2



Nut Replacement Kit

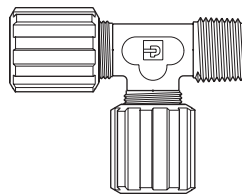
Contains one nut, one gripper, and one ferrule

PART NO.	TUBE OD (IN.)
532 6860	1/8
532 7056	1/4
532 7252	3/8
532 7448	1/2
532 7644	3/4



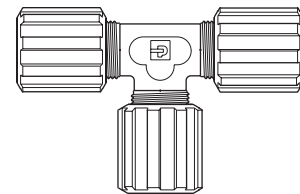
Male Branch Tee

PART NO.	TUBE OD (IN.) x NPT
532 4697	1/4 x 1/8
532 4732	1/4 x 1/4
532 4760	3/8 x 1/8
532 4788	3/8 x 1/4
532 4816	3/8 x 3/8
532 4844	3/8 x 1/2
532 4872	1/2 x 1/4
532 4900	1/2 x 3/8
532 4928	1/2 x 1/2
532 4956	3/4 x 3/4



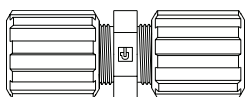
Male Run Tee

PART NO.	TUBE OD (IN.) x NPT
532 5656	1/4 x 1/8
532 5684	1/4 x 1/4
532 5796	3/8 x 1/4
532 5880	1/2 x 1/4
532 5936	1/2 x 1/2
532 5964	3/4 x 3/4



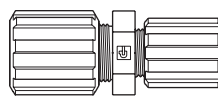
Union Tee

PART NO.	TUBE OD (IN.)
532 6132	1/8
532 6160	1/4
532 6188	3/8
532 6216	1/2
532 6244	3/4



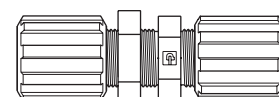
Union Connector

PART NO.	TUBE OD (IN.)
532 1484	1/8
532 1512	1/4
532 1540	3/8
532 1568	1/2
532 1596	3/4



Reducing Union Connector

PART NO.	TUBE OD x TUBE OD (IN.)
532 1764	1/8 x 1/4
532 1820	1/4 x 3/8
532 1848	1/4 x 1/2
532 1876	3/8 x 1/2
532 1904	1/2 x 3/4

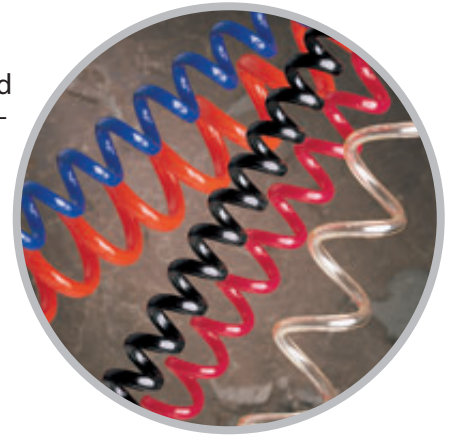


Bulkhead Union

PART NO.	TUBE OD (IN.)
532 2072	1/8
532 2100	1/4
532 2128	3/8
532 2156	1/2
532 2184	3/4

Create Parts Customized to Meet Your Needs

Going beyond basic tubing, hose, and fittings has been an integral part of NewAge Industries' business for many years. We possess the capabilities and experience to create custom parts perfectly suited to your application. Post-extrusion fabrication and hose assembly opens another range of options for providing parts to your exact specifications at a reasonable cost.



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- Custom Extrusions
- Overbraiding & Jacketing
- Hot Bond® - Thermal Bonding
- Heat Formed Shapes
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- Hose Assemblies
- Dip Molded Tubing
- Molded Silicone Components
- And More

Discuss your application with someone from our knowledgeable Sales Team today
800-506-3924 or 215-526-2300

Meet Some of NewAge Industries' Owners

Through an **Employee Stock Ownership Plan (ESOP)**, NewAge **employees are part owners** in the company. Our jobs are part of an investment in our future, and that's reflected in our communications with customers and suppliers, and with each other, now more than ever. When a customer calls, they can speak with an owner.

ESOP Employee Owned
 for Your Benefit



Annabelle Black
 Inside Sales
 Manager/Owner
 23 years



Michael Gillespie
 Fabrication/Manu-
 facturing /Owner
 4 years



Dave Schofield
 Warehouse Supv./
 Traffic Mgr./Owner
 5 years



Lorrie McGough
 Sales Order Clerk/
 Accounting/Owner
 8 years



Tom Slovik
 Quality Control
 Inspector/Owner
 1 year



Anthony Schmidt
 Warehouse/Owner
 1 year

More NewAge Industries Products

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PVC
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Cut
Size
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Coil
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Fittings & Clamps for Fluoropolymer

Pureloc® - PFA compression fittings. Stock sizes for 1/8" to 3/4" O.D. in 13 styles. Made from chemically inert fluoropolymer.

Thermobarb® Plastic - Precision molded barbed fittings in nylon-6, high density polyethylene, PVDF, polypropylene, reinforced nylon, or reinforced polypropylene. Sizes for 1/8" to 1" I.D. tubing in 15 styles.

Thermobarb® Brass - Durable brass barbed fittings. Sizes for 1/8" to 1" I.D. tubing in 10 styles.

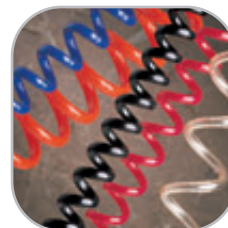
Oetiker® Ear Type Clamps - Stainless steel or zinc-plated carbon steel clamps with a unique breathable design. 35 sizes from 5/32" to 1-9/16" in 3 styles.

Kwik Clamp™ - Nylon double-bond hose clamps. 31 sizes from 1/4" to 4-1/4" nominal O.D.

Worm Gear Clamps - Stainless steel worm screw clamps. 28 sizes from 3/8" to 6" in 6 styles.

PTFE Thread Sealant

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High Purity Tubing & Hose

Sanitary tubing, hose, fittings, assemblies, and molded components from our AdvantaPure division meet the needs of the pharmaceutical, biotech, food and beverage, dairy, cosmetics and fragrances, and chemical industries, as well as other sanitary applications. AdvantaPure products are available through a network of select distributors. www.advantapure.com



Celebrating
over

55

Years
of Service
1954-2010

ESOP

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for Your Benefit

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1/13/10

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